

THE SCIENTIFIC APPREHENSION OF THE SUPERPHYSICAL WORLD

(1905)

"The three true stages of knowledge are as the three acclamations, *Sancte! Sancte! Sancte!* Holy in the description or dilatation of His works; Holy in the connection or concatenation of them; and Holy in the union of them in a perpetual and uniform law."—Bacon.

"Methinks, like Gideon's little band,
God with design has picked out you
To do these noble wonders by a few . . .
And now He chooses out his men
Much in the way that He did then;
Not those many whom He found
Idly extended on the ground
To drink with their dejected head
The stream, just so as by their mouths it fled;
No, but those few who took the waters up
And made of their laborious hands the cup."¹
—Abraham Cowley (1656),
Ode to the Royal Society.

A PRELIMINARY PARABLE

In a short and little-known poem entitled "The Horseshoe,"² one that is almost lost sight of amid the rich overgrowth of his greater works, Goethe has related an incident, perhaps apocryphal but at any rate ideally true, in the life of our Lord, which will serve as a starting-place for a reasoned consideration of our subject, the Superphysical World. The Master, accompanied by a little band of followers, was journeying on foot through Galilee, discoursing to them as He walked of that subject which it was His mission to proclaim, which with a perennial

¹ Judges vii. 4-7.

² *Legende vom Hufeisen* (Werke: Parabolisch).

wealth of metaphor and parable He was continually endeavouring to make clear, but which, notwithstanding His similitudes, His hearers seem to have found so much difficulty in understanding—the Kingdom of Heaven. As He talked He descried in the mire of the highway a horseshoe which He bade him who walked nearest Him to pick up and keep; some time or other it might prove of service. But the disciple thus addressed—and tradition has been wont (perhaps unfairly) to attribute these examples of apostolic perversity and stiffneckedness to St Peter—was so engrossed with his own ideas of the subject under discussion, so pre-occupied in putting a mundane and material instead of a spiritual interpretation upon the Master's promised Kingdom, that he disdained to lower his thought to so mean an object as a cast horseshoe, and ignored the request to pick it up. Whereupon the Lord stepped back a pace or two, and Himself stooped, lifted it out of the mire, and, proceeding with His discourse, bore it with Him, saying no more about it. At the next village He, unobserved, sold it for a penny at a blacksmith's shop, and with the money bought some cherries which He secreted in His robe. Later on, when the disciples, tired and thirsty with their journey under the midday Syrian sun, began to flag and drop behind in the march, the Master, Who now was walking on alone in front and perceived their distress, let fall here and there a cherry in their path; and he who had at first disdained to stoop once for the horseshoe was now only too thankful to stoop many times to pick up and refresh himself with the mysteriously provided fruit.

Such is Goethe's parable of the horseshoe. Like all great parables, it is capable of many interpretations. It will bear, I think, the interpretation I now suggest. It inculcates the imprudence of despising any element or factor, however apparently useless and degrading, in God's wonderful Universe. It teaches that even the relics and by-products of life should not be regarded as "common or unclean," but should be sedulously husbanded, valued, and transmuted into food for the mind of man—so that, of the infinite store and variety

of provision He has made for us, *nothing*, not a fragment, should be lost.

Is not the horseshoe typical of that body of facts known as psychical or metapsychical phenomena, which the majority of people, preoccupied with their own special religious or rationalised views of life, are wont to ignore or to exclude from their conception of the Cosmos? Are not these facts ignored, or excluded from purview, for some such reason as swayed the obstinate apostle, viz. that, even if realities, they are trivial, repulsive, not in harmony with their religious or scientific views, or, may be, that they are the cast-off shoes of an order of life which, in their own sight, is negligible or better left alone?

There are many, however, who are satisfied that the phenomena referred to are genuine and scientifically accredited facts (however originated), but ignore them because of the difficulty of explaining them and of reconciling them with other facts not of an abnormal type. Their minds, unable to co-ordinate these facts with established knowledge or beliefs, either remain in a state of perplexity, abandon the problem as insoluble, or attribute the phenomena to wholly improbable or erroneous causes. It may be asserted—with some confidence, I think, in view of the present state of public perplexity, and of the failure of many able minds to come to positive and satisfactory conclusions on the subject,—that the task of providing an explanation is wellnigh hopeless so long as the phenomena remain uncorrelated with other established knowledge. “We are not masters of the accidents of which we are spectators,” says Professor Richet, speaking of these phenomena. “Why? Perhaps because our intelligence is not in a state to seize them.” The present paper is an essay towards remedying the defect of which Professor Richet speaks; towards taking such a comprehensive view of the Cosmos that the psychical phenomena, often miscalled supernatural, may be seen to be attributable to causes perfectly natural and inevitable, to causes which may be adjusted (though perhaps only approximately) into appropriate places

in the universal scheme of things. Those phenomena (the genuineness of which, on the strength of many accredited authorities, I assume as established) are

Like perspectives which rightly gazed upon
Show nothing but confusion; eyed awry
Distinguish form;

and from the consideration of them in association with other branches of scientific knowledge, results of enormous practical value to humanity may, I am led to think, ultimately be obtained.

There are two methods, and only two methods, by which the superphysical world may become apprehended (I am careful not to say comprehended) by the human mind. One method, which is relatively swift, immediate, and self-convincing, is by the development of the spiritual consciousness of man; the other, which is slow, gradual, laborious, and tantalising, is along the line of scientific research and intellectual investigation,¹ a line along which we Western races (as races) are now travelling.

Of the apprehension of the superphysical by the spiritual consciousness I will say but a word. The axioms which govern it have been stated for all time by many teachers and in many tongues. They are summed up in words which are familiar to us: “Seek ye first the kingdom of heaven—which is *within* you. . . . Let not him who seeks cease until he finds: and when he finds he shall be astonished. Astonished he shall reach the kingdom. . . . Strive therefore to *know yourselves* and ye shall be aware”—of many things that compass you about unperceived by your physical sense faculties. The *Logia* of all the great Wisdom-teachers of the past inculcate self-knowledge, development of the spiritual self in man, as the infallible method of cognition of a world other and higher than this physical one of ours. And in all ages the witness of

¹ All the great religions, especially the Vedanta philosophy, emphasise this conclusion. The Vedanta inculcates that the superphysical may be apprehended by the methods (1) of *Sankhya*, intellectual discernment, and (2) of *Yoga*, mystical devotion to the Supreme. But the greater of these is *Yoga*. See the *Bhāgavād Gita, passim*.

the Wisdom-teachers has been found to be faithful and true. In all ages have there been strenuous seekers of "the Kingdom" to whom a transcendental world has been opened and proved as objective a reality as the physical. Meditative mystics, introspective saints, simple men and women, often unlettered but pure in heart,¹ in moments of exalted consciousness, have been, in St Paul's graphic symbolism, "caught up into the third heaven and heard unspeakable words," or undergone remarkable experiences of a like character. The most valuable achievement of modern psychology is that it has stopped the mouths of those who alleged these experiences to be the hallucinations of deranged visionaries, and has formulated the inductions that the mind has a reality of its own independent of the physical order; that a noumenal world is positively as existent as the phenomenal, and is one whence perpetually issue streams of life and light and inspiration to the soul of man, whether he be conscious of the fact or not. Indeed, a well-known psychologist has recently made the following candid statement, which wholly corroborates the proposition I am submitting: "Our result so far is that the attempt to explain the Universe in the terms of physical energy has brought us into an *impasse*. This suggests the question whether the attempt has not been a misguided one from the start, and whether we might not have fared better had we reversed the process and taken as our starting-point, instead of the atomic structure of matter and the law of the conservation of energy, the structure of our own *wills* and the system of ends of which consciousness in its essence consists."² It is a humiliating confession to make, nineteen centuries after the utterance of the explicit instructions of the wisest and most perfect of mankind! Time is ill spent in bemoaning lost opportunities, but one can scarcely refrain from reflecting for a moment what our knowledge of the Universe might have been

¹ Morally, psycho-physically, and etymologically, purity implies power.

² Professor J. H. Muirhead in *Ideals of Science and of Faith*, p. 97. The italics are mine.

to-day, and how our sociological conditions might have stood at present, had psychology rather than physics been our chief study; had we examined and developed the latent spiritual faculties within us at least *pari passu* with our investigation of the material world without us, instead of adding the incubus of further complexity to the heavy funded debt of ignorance with which humanity stands at all times weighted.

But those who have followed those true *principia* of knowledge and become spiritually conscious of a superphysical world (for that door of approach is still always open) are but an almost infinitesimal minority. Humanity in the mass has ignored their methods and denied the validity of their results. It has become so utterly sceptical of all but material phenomena, that when psychical phenomena demand consideration, it disclaims to stoop for the horseshoe—nay, it has often affirmed that no horseshoe is there to stoop for. Certain scientific leaders of world-wide repute, however, have stooped—and now certify the genuineness of the phenomena. They are discovering, one by one, a number of facts with which (as with the cherries scattered in the disciples' path), if it will, the world, thirsty and weary of its own materialism, may hasten to refresh itself and enlarge and recast its aspect of the Cosmos. Discovered, I say: yes, but that is only half the truth. We are wont to call the last four centuries, centuries of unprecedented scientific discovery. So they are; but it is wholesome, it is chastening to one's intellectual pride—nay, it enables us to attain a truer, juster mental outlook—to reflect upon the circumstances under which those discoveries have been made, and the moral, temporal, and intellectual needs of humanity with which they have synchronised and which they seem destined to supply. The cherries, you will remember, were not found until a wise foresight knew how urgently they were needed, and with what eagerness and gratitude they would be seized and turned to good account.

Rightly viewed, then, the epoch of scientific investigation which began four centuries ago, and the end of

which is not yet, is one not so much of discovery as of disillusionment. That is the point made so effectively by Mr A. J. Balfour when, in his presidential address to the British Association (1904), he endeavoured to give a moral value to the intellectual perceptions of modern physicists. Let me quote his words: "The beliefs of all mankind about the material surroundings in which it dwells are not only imperfect but fundamentally wrong. It may seem singular that down to (say) five years ago our race has, without exception,¹ lived and died in a world of illusions; and that its illusions, or those with which we are here alone concerned, have not been about things remote or abstract, things transcendental or divine, but about what men see and handle, about those plain 'matters of fact' among which common sense daily moves with its most confident step and most self-satisfied smile. Presumably, however, this is either because too direct a vision of physical reality was a hindrance, not a help, in the struggle for existence; because falsehood was more useful than truth; or else because with so imperfect a material as living tissue no better results could be attained." I hope I am not reading too much into the whole argument of Mr Balfour's most luminous address in saying that he seemed to harbour the idea suggested by Goethe's parable—that the recent and transcendently important revelations of natural science have, like the cherries, been appropriately timed and permitted by the providence and beneficence of Someone who, unseen, is on the road ahead of us.

THE PROCESS OF DISILLUSIONMENT

Consider, then, for a moment, not as discoveries but as disillusionings, a few of the chief great conclusions of scientific thought in regard to the material Universe.

¹ Mr Balfour has overlooked the hoary religio-philosophy of India, the essence of which is discrimination between the real and the illusory, and which displays a knowledge, obtained intuitionally, of the workings of the Cosmos which is only now beginning to be ascertained and verified by the experimental methods of Western science.

To do so will serve two purposes. (1) It will assist us in formulating on an intellectual and scientific basis an apprehension of the superphysical. And (2) it will make clear how essential to formulating such an apprehension it is to beware of trusting too implicitly in ordinary utilitarian sense-perceptions, which, as Mr Balfour pointed out, have been evolved through the ages merely for the rough-and-tumble, tooth-and-claw struggle for physical existence, not for the higher ends of abstract and scientific thought, of ethics or things superphysical.

Just as Nicodemus on seeking information about religious truth was confronted at the outset by a puzzling paradox, so in any attempt to apprehend the superphysical by the intellectual an analogous proposition must be accepted. Sacrifice, renunciation of all illusory preconceptions and prejudices born of our sense organs is essential, and, fortified indeed by all we have been enabled to learn through those primitive channels of knowledge, we must obey the maxim of the father of modern learning—that "it is no less true in this human kingdom of knowledge than in God's kingdom of heaven, that no man shall enter into it except he become first as a little child." For the study of the physical we have used science and our senses; for that of the superphysical we must learn the first principles of super-science and employ a chastened imagination.

The commencement of the process of disillusionment, then, was the recognition of the crude fact that the earth was not flat but globular. Then the geocentric theory of the earth's position proved illusory; from a position of supposed paramountcy in the Universe, our world, to the easily cheated human mind, became degraded to an insignificant, ephemeral mite floating in a void—a conclusion as false as that which preceded it, for even the crescent light of truth cast fresh shadows of deception. Man and his habitation appeared, under the development of astronomical science, to be of no account, so infinitely small were he and it as compared with the cosmic bulk. Turning his attention away from the abysses of space he centred his thought on

the material constitution of his own world, only to meet with fresh surprises. Matter which had been reduced to a number of elements, elements which had been resolved to primal atoms, became (again in Mr Balfour's words) "not only explained, but explained away" into the abstract substance known as ether. Our senses had been deceived in their conception of the ultimate constituents of physical matter. The atom was found capable of being split; its very name as regards physical matter is obsolete and a misnomer, for whole universes of invisible corpuscles are now conceived as swinging, freely and roomily as sidereal systems in the heavens above us, within the ample latitudes of "that which is not further to be cut." And lastly, the void our world seemed to float in has proved perhaps the greatest illusion of all. For the postulation of the interstellar ether, and of the fact that the gross matter is but a modification of that supersensuous substance, necessitates the corollary that we are placed and safely packed away within a Cosmos of which we are an integral factor, and one whose remotest parts must needs be fashioned of the same raw material as ourselves, to whatever modification of form that material may, at any given place, be subject.

Thus the physicist who not long ago believed himself to be dealing with ponderable ultimates, and, "subdued to what he worked in," was constrained, almost against his will, to become a materialistic philosopher, is to-day aware that, as regards his sense-perceptions and save so far as they serve to steady his judgment, he might almost as well be a blind man; for he knows himself to be dealing with material so attenuated, subtle, and elusive as, of itself, to afford him no philosophic foothold, and to be engaged in abstractions so refined as to necessitate the use of faculties that transcend the utilitarian as far as a man's brain transcends a sheep's. For is he not at last already working within the confines of the superphysical world?

If to the conclusions of inorganic physics we add those of biology (or organic physics), we are met by

some significant facts. Even Professors Haeckel and Ray Lankester detract somewhat from the merits of their own peculiar philosophies by revealing the fact that in our brains, the organs through which our consciousness operates, there is a surplusage of cerebral development beyond the needs of a material struggle for life—a fact which leaves a door open for the possible solution of many psychical phenomena whose reality is already established, as well as giving promise of the maturing of further faculties, latent and undreamed of, within us; for another induction of biology is that Nature's method is to create the organ long in advance of the owner's capacity to use it.

But, it may legitimately be asked at this stage, what is the place and destiny of man amid this everlasting flux of matter, this kaleidoscopic world of illusion? What guarantee has he that even his present knowledge of the physical world is not illusory; that even primordial ether and the inferences to be drawn from it will not in turn prove to be illusions that will give way under further research? To answer truly we must say—There is no guarantee: it is more likely than not that we shall still further be undeceived. Already mathematical analysis of the ether suggests that, abstraction though it be, still more remote and refined physical *substrata* must be imagined in order to make good even our present conception of it. Its assumed rigidity must be secured by the hypothetical motion of some still more primal material; there are ethers within the ether.¹ Yet, despite this bewildering thought, there must steadily be borne in mind the dictum of the psychologist—so appropriately timed as to neutralise the despair that otherwise might have been felt at so paralysing a prospect,—that notwithstanding the shadow-play of unrealities, despite the

¹ Professor Whetham, *Recent Developments of Physical Science*, p. 279. By Hindu philosophers five ethers, and their respective vibratory qualities, are recognised, of which only one, the luminiferous, is at present apprehended by us. See, for instance, *Nature's Finer Forces*, by Râma Prasâd, M.A. (Theosophical Publishing Society).

exposed trickeries of sense and the revelation of fresh, and possibly equally fallacious, aspects of the material world, the human consciousness may stand firm and unblenched. "The Mind is in its own place"; it has a reality of its own quite outside of the physical order, from the security of which it may contemplate without fear of being overwhelmed the shadow-dance of matter and watch the wondrous unfolding of world upon world without end. "When we deal with the cosmic and the general, we deal only with the *symbols of reality*," says Professor W. James¹; "the *axis of reality* runs solely through the egotistic places, and our greatest, most responsible concern is our private, personal destiny, after all." Here, then, in the separation of the real from the unreal, of the infinite and eternal from the finite and temporal, is the starting-place for any exploration of the superphysical world. Mind, spirit, has vindicated its own reality; has established an independent empire of its own. Matter has disclaimed jurisdiction over it. "The deep (firmament) saith, it is not in me; the sea saith, it is not with me." Such is the testimony of the material world to human immortality; negative testimony if you will; perhaps all the more important on that account.

In the security of this knowledge, then, we can afford to await developments of natural science, disillusionments though they may prove to be, in the assurance that they will bring us, step by step, as they have done hitherto, nearer to an understanding of that superphysical world whose existence we are seeking to establish. Observe how the prophetic words of the Wisdom-teacher are being fulfilled. "Steadily, unflinchingly, we strive to pierce the inmost heart of Nature, from what she is to construct what she has been and to prophesy what she yet shall be. Veil after veil we have lifted, and her face grows more beautiful, august, and wonderful, with every barrier that is withdrawn." So wrote in 1898 one of the chief explorers of the infinitely little (Sir William Crookes).² And

six years later the most eminent living investigator of the infinitely great (Sir William Huggins) said: "By each discovery the vision of the world has become more glorious, the wonder of it more amazing, while chambers and palaces of nature still unexplored remain the exhaustless heritage of all coming generations. Are our theories more than artificial conceptions, mental pictures co-ordinating a large range of facts and guiding us to new facts? Have we approached even within telescopic view of the reality of things? . . . What is *behind* the obvious trend and direction of development of the Cosmos?"¹ And, simultaneously with these expressions of amazement, the sands of the Libyan desert yield up to still other seekers a tattered fragment of papyrus, whereon are written words that are both an answer and a trumpet-call to further effort: "Let not him who seeks cease until he finds; and when he finds he shall be astonished. Astonished he shall reach the Kingdom, and, having reached the Kingdom, he shall rest."² And though the Kingdom spoken of is an inward principle, not an external fact capable of being grasped and analysed by science, none the less is it true that science herself is pushing her wondering way through the outer courts of Nature's temple, and advancing slowly but surely towards the inmost sanctuary where only the spiritual consciousness of man may hope to enter.

CONSTRUCTIVE HYPOTHESES

We have reached a stage in our argument where it becomes possible to consider certain hypotheses in regard to the superphysical world: I. Its inorganic structure; II. The nature of the life that inhabits it; and III. Interaction between it and the physical world.

I

As upon the physical plane investigation of material conditions has preceded the study of mental realities,

¹ *Varieties of Religious Experience*, p. 498.

² British Association Presidential Address, 1898.

¹ Speech at Royal Society Dinner, 9th December 1904.

² *New Sayings of Jesus*, discovered at Oxyrhyncus, 1903.

so it will be convenient in dealing with the superphysical to follow the same order of enquiry. Now physics, in first postulating the presence of an all-pervading medium and then resolving gross matter into that medium as its primal constituent, has opened up to us some of the most extraordinary mental pictures it has ever been the fortune of the human intellect to contemplate. It invites us, as Hegel once said of the study of philosophy, to stand on our heads. And our amazement gradually increases as we behold the abstruse technicalities of science to be invested with an undreamed-of moral value, and perceive that by the intellectual investigation, pushed to the limits of human understanding, of the remoter parts and more secret laws of Nature, we come to hear "large, divine, and comfortable words" of truth, which not merely confirm our deepest intuitions, but tell us also of eternal principles, ruling in those ulterior planes and dimly discerned in this, obedience to which is, for our peace, as essential "in earth as it is in heaven."

We have not yet become habituated to the conception, so utterly subversive of all preconceptions based on the evidence of sense faculties, that we live and move, not in a void but in a solid, not in a *vacuum* but in a *plenum*. Like the harmless, necessary phagocytes that swarm within our bodies, microscopic beings to which the confines of our blood-vessels constitute all their universe, so we human mites and all the stellar systems have been conceived as ranging about within the stupendous organism of some vast Being to whom, for whose well-being, we too are necessary. But separating for the moment in our thought the material from the mental constituent, we are constrained to view the Cosmos as a rigid *solid*, of which the invisible and, to us, apparently void portion, is by far the greater, and, inferentially, must be by far the more important factor. Conceive to yourselves a large block of pure, flawless ice or glass, and imagine some strain, electric current, or other form of energy applied to it in such a way that certain particles of the block respond to the strain, so that the virgin block

instantly becomes studded with innumerable fractures, nodules, or groups of particles more closely concentrated than before. (This example is convenient, but is, strictly, erroneous; for according to the vortex theory matter is not a concentration of, but a hole in, the ether; it *appears to us* as a concentration, but, again, appearance is in conflict with reality; to a superphysical being our material world would be relatively an unreality, but his a reality.) Imagine further the energy to be withdrawn or the current reversed, and the concentrated particles to be capable of flying back to their original state and position; the nodulated block becomes virgin again, "as clear as crystal." This imaginary experiment illustrates very crudely the supposed process of creation of the earth and stellar worlds; for their constituent matter is now shown to be a discontinuous substance, "a complex of energies which we find together in the same place." At the fiat of some mighty energy working in the invisible they have become manifest; at the withdrawal of that fiat they would cease to be; a momentary relaxation of the will which holds the objective universe together would cause it instantly to dematerialise¹ and, as foretold by Shakespeare's prophetic intuition, "like an insubstantial pageant faded, leave not a wrack behind"—a truth the significance of which cannot fail to be apparent to those who have witnessed the manifesting and dematerialising of forms by invisible intelligences better skilled in the laws of matter than we.

From this mental picture of the material Cosmos two consolatory certainties become clear to us. First, it is a unity; whether finite or infinite in magnitude, despite its myriad modifications of form, a true *Unumversum*, in which (save relatively to sense perceptions) there is no up or down, no near or far, no past or future,

¹ "Theoretically an explosive wave of atomic disintegration might be started through all matter which would transmute the whole world and leave but a wrack of helium behind."—Whetham, *Recent Development of Physical Science*, p. 245.

in which no part can be intrinsically greater or less than another, and the inherent energy and (or) material substance of which, however gross or rare for the time being, must be eternally conserved, as physical science indeed claims that they are. And secondly, if, by the displacement of the geocentric theory, and the consequent relegation of our earth to insignificance in relation to the All, our world be thought to have lost dignity, and humanity to be a negligible trifle amid the vast totality (and the thought has darkened many minds¹), that seeming loss has been a thousandfold restored. That is a purblind philosophy which says, as Dr Darwin despairingly said five years ago,² that our world is "a puny planet, circling round a star of inferior rank." Relatively to other worlds, of course, it is; but it is one that is knit in community of constitution and material with the rest; all are members one of another, not so much separated as unified by that invisible medium of which all things visible are but the temporary excrescences. While we? We are no exiles from the heart and providence of the Eternal Parent Who makes the *entire* Universe His dwelling-place, and Whose Mind must be at least conterminous with His vesture of Matter, but offspring, "ray-children," miniatures of Him, placed—demonstrably placed—within the very body of His Being. And what of high and good and beautiful our puny souls can thrill to, is, we may be assured, no less freely distributed, though perhaps infinitely more readily responded to, in the remotest star, and in those awful, seeming vacuities of space, which lose their dread for us when we realise that they also, and not alone the sidereal creation, are the very Temple of the immanent God.

The comparison here made of the material Cosmos to a block of glass within which we are encased is, I think, justified on grounds other than those which physical science suggests. I hope no apology is necessary

¹ E.g. "Le silence éternel de ces espaces infinis m'effraie."—Pascal, *Pensées*.

² British Association Presidential Address, Johannesburg, August 1905.

for being eclectic and laying under contribution other sources of suggestion in support of the hypothesis I am endeavouring to substantiate, viz. that the supersensual substrate of the physical plane is the gross matter of the superphysical plane. In pre-scientific days, before ether, as such, was thought of, or any such conception of the material Cosmos upon reasoned lines as is now possible to us was practicable, this idea of a solid gelatinous universe, parts of which had not yet become precipitated into physical form, seems undoubtedly to have been present to many minds. Now, thought always precedes action; a man's deeds are his objectified thoughts; and, arguing from the microcosm to the macrocosm, we perceive the possibility of the phenomenal world having undergone a noumenal pre-existence. In the scriptures of all the great religions, and in the Platonic philosophy, this idea obtains. References to celestial designs and occurrences, to conflicts between organised forces of good and evil, to tragedies enacted upon spiritual planes "from the foundation of the world," and destined to subsequent re-enactment upon the physical plane (like dreams and phantasmal *simulacra* which often precede actual events in human life), occur in the myths of forgotten faiths, and in the scriptures of creeds now current. The clairvoyant seer of the Apocalypse, speaking of the material of the superphysical world in the metaphor readiest to him, describes it repeatedly as "a sea of glass like unto crystal . . . clear . . . transparent glass."¹ Shakespeare's unerring judgment, again, tells in a wonderfully perspicuous passage of the contemplation by superphysical beings of, not our material bodies, but "man's glassy essence."² But I refer especially to the traditions of the existence of a pre-mundane humanity clothed in a body of supersensual materiality, an example of

¹ Rev. iv. 6; xxi. 18-21.

² *Measure for Measure*, ii. 2. To a superphysical being the material body would be invisible; but the etheric, or "glassy" body, being of the same nature as his own, would be an objective reality. Whoever has looked through a human body exposed to Röntgen rays will the better appreciate the translucency of the physical form.

which is to be found in that most wonderful record of speculative enquiry and spirit-communing running through the second Book of Esdras in our Apocrypha. Here (ch. iii. 4-7, and ch. vi. 54 in particular) man, spoken of under the generic title Adam, is taken for granted as having peopled a primeval spirit world, "paradise," or Eden, "before ever the (physical) earth came forward"; and these protagonists of ours, it is asserted, were in consequence of moral transgression "appointed to death," to a cessation of their then condition; were doomed, in other words, to imprisonment in grosser matter; to become temporarily materialised spirits upon a lower plane than they had hitherto occupied. As the biblical writer expresses it, "The Lord God made coats of skins and clothed them."¹ Here, then, is the origin of the ancient and much misunderstood doctrine of the Fall; a fall in which moral lapse, if such there was, resulted automatically in material degradation, and one from which restoration to the pristine exalted condition was possible only along the gradual predestined lines of evolution through which we recognise our world now to be passing.

This digression into a sphere of thought with which science has no present concern may be permitted for the sake of comparing the conclusions of modern thought with old-world ideas of the genesis of things. Perhaps such a comparison may be at some time not without use; for, indeed, there is upon record a remarkable precedent for the formulation of scientific truth from the homologies of transcendentalism. It is not so well known as it might be that gravitation, and the laws of force, resistance, and orbicular motion, were the result of the diligent study of metaphysical resemblances; that the great inductions of the master-mind of science, Sir Isaac Newton, which led up to our present conception of the ether, were based on the intuitional perceptions of the tutor at whose feet he did not disdain to sit—the humble cobbler, but master-mystic, Jacob Behmen.²

¹ Gen. iii. 21.

² William Law (in the *Spirit of Prayer*, 1749) wrote: "The illustrious Sir Isaac ploughed with Jacob Behmen's heifer." Newton's

To pass on. The postulation of the ether by science marks the commencement of a new and unparalleled era of human thought. It is the basis upon which must be formulated the laws governing psychical phenomena. A few years ago, according to the acid humour of the statesman-chemist, the late Lord Salisbury, "nothing more was known of this all-pervading entity except that it can be made to undulate." To-day we have advanced a step beyond that nescient stage, though, to any but an expert capable of thinking in abstruse mathematical equations, comprehension of the subject is not easy. To avoid technicalities it may be said in rough terms that it is itself matter, so highly attenuated as possibly not to be gravitational (though this seems uncertain), but still ponderable matter¹; "a fairly close conglomerate of minute grains in continual oscillation . . . its structure may be fibrous like that of a bundle of hay; . . . persistency of strain in time with mobility of space."² It is far more complex than at first appeared, and, upon mathematical analysis, its existence and properties can only be accounted for on the hypothesis of other ethers within it, just as ether itself exists within the denser atmospheric air. Its atoms are possessed of the silence of infinite motion, the sleep of a spinning-top, so that in the mass it is to be thought of as a rotational elastic solid;—a combination of qualities requiring some effort of thought to grasp; but we are upon, if not within, the borders of the superphysical, the fourth-dimensional and paradoxical, where a new order of thought obtains. Paradox, "an inversion of ideas with regard to the universe," begins with the hypothesis formulated, with the boldness which characterises genius, by Lord Kelvin,³ that "the scholastic axiom that two portions of matter cannot

own words, in deducing planetary attraction from the fact of Love, were "Idemque dici possit de uniformitate ea, quod est in corporibus animalium."

¹ Sir O. Lodge asserts it is not matter, but substance. Professor Mendeléef has estimated its atomic weight, on the assumed validity of a Periodic Law formulated by him.

² Whetham, *Recent Development of Physical Science*, p. 279.

³ *Baltimore Lectures on Molecular Dynamics*.

jointly occupy the same space" must in this case, "without contravening anything we know from observation of Nature, be denied; for matter and ether can both occupy the same space, since matter is ether, or rather a hole in the ether." And it has been further suggested by some acute thinkers¹ that as the earth moves along upon its endless way, its atoms, which may be conceived of as predetermined in form and combination by complicated grooves in the ether or matrix of physical matter, become condensed or rarefied, dilated or compressed, according as the ether-grooves, through which they pass, close, or widen—thus accounting for the phenomena of radio-activity and the transformation of so-called chemical elements, the crumbling of atoms, and the creation of new combinations of matter.

These conclusions indicate the extremely intricate connection and interdependence of physical and super-physical matter. We have been wont to think of them as dual; there is no reason why henceforth we should not think of them as one—dual only in manifestation, as are steam and water. The mechanical laws of the ether are not yet known; something of its potentialities is obvious from the phenomena of light and of the waves of electro-magnetic force artificially generated for the purposes of wireless telegraphy, which travel at the same rate as light, but differ from light-waves in length and their ability to produce vision. But what of its potentialities of which we are ignorant? When its laws come to be understood and it becomes possible to link up the further knowledge thence derived with that of psycho-physics, there will doubtless be at our disposal an intelligible and demonstrable explanation of those complex interactions of mind and matter classified as telepathy, clairvoyance, clairaudience, and psychometry, which at present rest outside the pale of official science through the absence of any known principle co-ordinating them with other recognised

¹ See Professor Osborne Reynolds' *On an Inversion of Ideas as to the Structure of the Universe* (Cambridge University Press), and C. H. Hinton's *New Era of Thought* (Swan, Sonnenschein & Co.).

phenomena, and resemble that detached flotsam upon the ocean which signified to Columbus the propinquity of a new world. I anticipate even that, in due time, humanity, having developed sufficient moral stability to be entrusted with such terrible potencies, will acquire—as a few individuals have acquired—the ability to employ them; to harness to our practical use those secret forces, the manifestation of which now appears abnormal and supernatural to a race still but emerging from infancy. The mechanical functions of this invisible substance, ether, must needs, even from the little we know of it, be simply boundless; and this, looked at merely from our point of view upon the physical plane, and without reference to what must be patent to higher orders of unseen life and its possibilities of manipulation by them, as evidenced by many of the phenomena familiar to students of the occult. Eternally self-contained and self-conserved, it needs must conserve also the record of all that passes within it. To it, there can be no doubt, are due the phenomena of hauntings and telepathy. From it deflections can be made to the sensitised consciousness of the clairvoyant and psychometrist in accordance with a law which has been recently formulated—that "whatever has at any time happened at any point of an extended being is happening there still, and will always happen there."¹ Like a *camera obscura* of infinite dimensions, it registers every scene that falls within the range of its ubiquitous eye, and treasures up every public or secret thought that is projected into it, "whether it be good or whether it be evil." Not without good reason has it been termed the "cosmic picture-gallery,"² *Memoria mundi*, the Judgment-books, the Recording Angel.

As it is both useful and of interest to make constant cross-reference from the progress of Western science to the sagacious insight of the speculative philosophers

¹ By Dr W. P. Montague, of Columbia University, New York, in *Hibbert Journal*, 1903-4, p. 280, where the principle is elaborated.

² See the chapter under this title in Mr Râma Prasâd's *Nature's Finer Forces*, before cited.

of Greece and India, we may supplement the foregoing conception of the ether and its functions with the significant words of the Hindu *Ishopanishad* (*circa* 500 B.C.): "The Atma (the *Autos*, Self or Body of Deity) does not move; is one; is swifter than the mind; the senses reach it not, as it is the foremost in motion. It goes beyond the others in rapid motion while itself at rest; in it the Recorder preserves the actions. . . . Whoso seeth all things in that Self, and Self in everything, from That he will no more hide."

Concurrently with our advance into the *penetralia* of the Cosmos along the lines of physics, an auxiliary road of approach is being opened for us by mental science; by the ascertainment of the principles of our own consciousness. Given an Ego with an imperishable reality of its own, independent of the physical order, and functioning through the limitations of the mortal brain, what does it perceive and how far are its perceptions likely to be true or false to other fundamental realities?—that is the problem of psychology. The ordinary animal man, equipped for the material struggle for life, and unconscious of any but utilitarian ends, is as a rule satisfied with the world as it appears to him: the world is real to him since he lives in it; he knows, and wants to know, no more. But if he be constrained to take consciousness to pieces and examine its content, he finds it adjusted merely to rudimentary, embryonic purposes, and that what he has regarded as real and objective is so only upon its own plane, but is from the higher plane, to which *ex hypothesi* he truly belongs, unreal and subjective. He experiences, to repeat Lord Kelvin, "an inversion of ideas . . . without contravening anything that is known from observation of Nature," and to him has come, as it came to the seeker for religious truth, as it has come for the seeker of physical truth, an echo of the voice of the Wisdom-teacher bidding him, Renounce; rid yourself of deceptive preconceptions if you would be born again and look with larger vision. As Kant once well put it: "If the guilelessness of healthy ignorance needs only an organon to discover truth, the perverted

intellect with its sham science must first have a cathartic."¹

In psychology the disillusioning process dates from Kant, as in physics it dates from Copernicus. Kant indeed regarded himself as the Copernicus of mind: for, as the astronomer exposed the fallacies supporting the geocentric theory, and restored the sun to central rank in our system, so the psychologist stripped all illusive externals from the human mind and vindicated the lordship of the transcendental consciousness. The two chief obstacles to right thought and larger mental vision he found to be the ideas of Space and Time—useful enough conceptions indeed for present utilitarian purposes, but having in reality no existence in themselves, save as inseparable characteristics of consciousness, which, owing to its present physical limitations, does not have knowledge except as modified and toned down by sense-perceptions. Space and Time are instruments of the mind; they must be in the mind for us to observe that things are in them. Yet, despite appearances to the contrary, and save relatively, they are not realities; they only afford us the possibility for a comprehensive co-ordination of sense-elements, of time-ing and space-ing physical things, and have been likened to chemically prepared photographic plates on which the sunlight of experience combines and delineates things external to itself in definite form. Ridding ourselves of these utilitarian thought-instruments, we come gradually to knowledge of our true selves, and enter the larger intellectual life where we learn to discriminate between appearances and realities; and on regarding a given object, not to say, "This is so and so because it so appears to me," but to ask, "What are the limitations of my mind which make me thus perceive this?" and so gradually to clarify our minds for seeing things in their true selves and not merely their outward forms; for seeing them as they would appear to a higher being not limited as we. If we do not understand the true methods of perception of physical things, how shall we be able to judge

¹ Letter to Mendelssohn (1766).

of the transcendental and superphysical? We, in a world of three-dimensioned space and one-dimensioned time, must possess some true grasp of our own bearings before attempting to realise those obtaining among higher orders of life, freed of our limitations and occupying worlds of presumably ever-increasing space and time dimensions. And though the academic Pragmatist will urge¹ that such an attempt, if successful, would only result in "useless knowledge," he overlooks the benefit that would accrue to humanity by the adjustment to mundane life of such cosmic principles as might be deduced from such knowledge.

Is it reasonable, it may be asked, to suppose that humanity is intended, or will ever be able, to rid itself of its present Space and Time ideas; or, at least, to subordinate them within appropriate limits in its judgment of things? Analogies from the record of evolutionary progress, the already accomplished suppression of grosser instincts,² the widespread development of the clairvoyant faculty, and the premonitions of biology, necessitate, I think, an emphatic affirmative as answer. That the possibility has been predicted theoretically, that it has been achieved in fact in many individual cases, is an earnest of the probability of universal accomplishment. And as the attention of men is more and more diverted from the material and formal, and more and more directed upon intrinsic realities (as now many tokens show that it is being directed), the mind of humanity will gradually habituate itself to new methods and, to adapt Shelley's words, will

" *Think till thought creates
From its own wreck the thing it contemplates.*"

And such an advance in human mentality would mark and involve a simultaneous advance in human morality and sociology. The change in intellectual outlook, the elimination from our thought of unrealities, has been well called a process of "casting out the self." By

¹ As is urged in Mr F. C. S. Schiller's *Humanism*, Essay II.

² See Huxley, *Collected Works, Evolution and Ethics*, p. 85 and note thereto.

the removal of obstructing factors, by seeing things in their abstract essence, we learn to see them as they really are, to see humanity as it really is—as a higher being, and, therefore, as God sees it. We lose sight of self and develop inevitable altruism. Knowledge of the higher space, or of that which is higher than and includes space, is the basis of religion and altruism.¹ We are in sight of a principle of scientific truth which will some day utterly transform present social ideals, and help us so to regulate terrestrial life that it may be "in earth as it is in heaven."

The record of scientific discovery, then, has been throughout a record of disillusionment; a disillusionment, or cathartic, which we may regard as a necessary preparative for a still larger science. Research in both physics and psychology has brought us into contact with a superphysical world, subject, in both its material and mental phases, to a new order of law, necessitating absolute "inversion of ideas" about the Universe. In fact, inversion, which is only the scientific synonym for self-renunciation, is the moral corollary, as well as the practical consequence, of the results of all departments of scientific enquiry. And obedience (whether voluntarily undertaken, or necessitated by the compelling cosmic force of disillusionment) to the fundamental law of self-sacrifice is, *ipso facto*, attended by undreamed-of compensation in the surprising visions it gives us of the great unities that needs must underlie the Universe. It gives us in the sphere of psychology of the unity of mankind, linked imperishably to a larger, cosmic, Divine Mind. "The fact that the conscious person is continuous with a wider self through which saving experiences come, a positive content of religious experience, it seems to me is literally and objectively true."² It brings us in physics to a vision of solidarity in the world of matter, and the phenomenal world is perceived to be a precipitation into matter of an ante-

¹ See Mr C. H. Hinton's Works, and note the natural evolution from knowledge to altruism foreshadowed in 2 Pet. i., particularly vv. 5-7.

² James, *Varieties of Religious Experience*.

cedent noumenal world. It demonstrates to us through metaphysics (regarded in its modern, not its classical, meaning) that what is thought of from the physical plane as noumenal, becomes phenomenal on a higher plane, and as such must be there perceived by discarnate consciousness, and is so perceived by incarnate consciousness having the faculty of dissociating itself from its normal physical limitations. Here on this plane, in Professor James's words, "we perceive but the symbols of reality"; on the superphysical plane realities themselves are present.

"All we have hoped and willed and dreamed of good shall exist
Not in semblance but itself . . .
When eternity affirms the conceptions of an hour."

II

And what of *life* within the vast cosmic spaces, eclipsed from sight by our physical limitations, through which our world slides "as the wind passes through a grove of trees"? That life—human life, to speculate no further—exists there, in unimaginable stages of growth and fulness of activity, is certain. Will Science be able to prove the fact inductively? At present she says "No"; and many others, whose assurance of the fact of survival based on other evidence is absolute, say "No" also. Time will decide. For the present, the Materialist (or, nowadays, perhaps one should say the unspiritual Monist, for in his enforced perception of the unity of all things he waives terminology and is willing to treat the universe indifferently as all matter or all spirit) asserts that though he "can just conceive the ponderable and visible structure of the brain may have a counterpart in ether,"¹ there is no tittle of evidence to show that mind can exist dissociated from the mortal nerve-structure that supports it during physical existence. Possibly the conception he "just" permits

¹ See Mr J. M'Cabe's criticism of Sir O. Lodge, *Hibbert Journal*, 1905, p. 755.

himself to make, may be, after all, a true one. Even the wildest visionary will hesitate to predicate mind or spirit uncontained by some vehicular matter, however attenuated. But possibly also, and this without making appeal to the moral or the psychical argument in favour of survival, the key to the biological problem is the necessity for "an inversion of ideas" in regard to *life*, comparable to the inversion that has become necessary and accepted in regard to matter.

The biologist has in fact run into a veritable blind alley of his own making, and, like the tailless fox of fable, invites all mankind to surrender an universal, inherent instinct, because, forsooth, he himself is baulked by a problem of his own setting! Survival of death, he tells us, is the "citadel of superstition,"¹ and, to his credit be it said, there is abundant precedent for suggesting that, in this case too, mankind has been subject to a ghastly illusion. But, after all, may not his conclusion be drawn from false premises? Water cannot be weighed in water, nor ether in ether. Can mind be measured in mind, or life be analysed in life? Does not *I am*² imply that *I am always*, that annihilation is under no circumstances predictable of *Me*, whatever happens to the material vesture, which is by no means *Me*? "It is my greatest desire," said Van Helmont, "that it might be granted unto atheists to have tasted at least but one only moment, what it is intellectually to understand; whereby they may *feel* the immortality of mind, as it were by touching." A single blast from the nostrils of a man who has formed a moral, instead of an intellectual, conception of the universe (e.g. Emerson's "Essay on Immortality") puts to utter rout the whole army of unspiritual monists for any healthy, unwarped mind. Until, however, the false trail of the biologist is abandoned, and an "inversion of ideas,

¹ Haeckel's definition.

² In Sanskrit (or, rather, Proto-Aryan) speech, the primitive language of civilised man, *aham* is the word signifying life, or I am, for the individual. The same word written as *Aum* is the sacred name of God in the East, or the *I AM* of the Old Testament. In both cases the word implies "eternal."

without contravening anything observable from the order of nature" is substituted,¹ official science will continue unable to certify the fact of *post-mortem* persistence of consciousness; but the circumstantial evidence—were there none other, and there is much—and the inevitable inferences to be drawn from the results of official science, leave no room for doubting that the granting of the certificate is but a matter of time. *Ignoramus* is the true and honest confession it makes to-day; *Ignorabimus* is an unworthy slander upon its own splendid past. But until ignorance, or mere conjecture, rises into hypothesis, what are the probabilities deducible from extant knowledge?

Revert for a moment to what we have learned from the discovery of the ether and all that it implies. From the precipitation of inorganic nature from a supersensuous abstraction into gross matter, liable at any moment to resolution again into its primal state, are we not justified in drawing an analogy in regard to ourselves? May we not imagine a pre-natal, post-mortem, humanity, which, as it moves through the seen and unseen spheres along the mighty spiral of evolutionary development, is, in the persons of its microcosmic units, fulfilling the same macrocosmic law? The secret fundamental verities of the universe reveal themselves in startling parallels. "Natural religion," said Emerson, "supplies all the facts which are disguised under the dogmas of popular creeds," and since the greatest, most important, verity ever established by science is the fact that the material world is a projection from a spiritual plane, is not the inevitable inference that the human spirit (like its Divine prototype and exponent, the Word-made-flesh), "trailing clouds of glory," *came down from heaven*, and in the course of evolution *was made man* (a process still in operation and not yet perfected); that it also in its inmost spiritual essence must perforce have issued from the pure mothering spirit of Deity, and has therefore in truth been *born*

¹ Though emanating from a physicist, not a biologist, such an inversion has been hypothetically put forward by Sir O. Lodge in an essay on "Life," *Hibbert Journal*, October 1905.

of a virgin¹; that it suffers constriction and crucifixion in the refining fire, the conditioning-house, of earth-life, buried as it is in dense matter and physical limitations; and that at length it, too, shall *rise again* to its true and pristine place of being?

III

Speculation upon the unimaginable possibilities open to discarnate life is scarcely profitable: as well might a deep-sea fish hope to realise the potentialities of terrestrial man. Divested of gross physical limitations; enfranchised with larger space and time dimensions; omnivident, "full of eyes within and without," to use the strained, despairing symbolism of even the Apocalyptic seer; its emotions, bared and quivering to such forces of good or ill, of love or hate as it is capable of responding to unmuffled by our armour of protective and Lethean flesh; qualified for work, yet subject to restrictions, alike incomprehensible to us—it plays its part in the cosmic scheme as we play ours a stage below. That interaction between it and us is as natural and inevitable as that between the separate cogwheels of a timepiece. Those who doubt this seem surely to be wanting in philosophic breadth and perspective. Such interaction may graduate from the sublime and sacred character spoken of in the terms of religion as "the

¹ The vexed question of the virgin-birth has its roots in a very ancient philosophical idea. In Vedic lore, undifferentiated virgin matter or ether (*prakriti*) is regarded as the source of the physical world which is the cause of all illusion (*maya*), the term *maya* often being used to express *matter*. *Maya* being then the *matrix* or matter through which spirit becomes manifest, is responsible for the idea that Deity has incarnated in the world, born of or through a virgin *mater* or mother. In Chinese Buddhism Maia is the goddess of creation and increase, apotheosised perhaps from Maia, the name of the mother of both Buddha and Krishna. The Virgin Mary (*mère*) has also thus come to be conceived by some fanciful thinkers less as a historical person than as a philosophical idea; and, by still others, as the human type of the sea (or virgin *mare*) of primordial matter which gave birth to the physical world. This strange mixture of fact, idea, and philosophy, has probably contributed to the present confusion of thought respecting the Virgin-birth of Christ.

Communion of Saints" to the astounding, if trivial and grotesque, type observable in the séance-room. If humanity exists in the unseen, it must needs be as varied as it is here; and presumably its desire for communication with us, manifested by what seemingly are intelligent personalities, must be keener on their part than on ours, and is a factor fraught no less with an abundance of moral significance than with an infinitude of pathos. That certain given psychical phenomena of an abnormal type, such as we are now familiar with, should not be due to such interaction, but should be producible by forces as yet undiscovered but latent in ourselves, is a proposition which is assuredly a legitimate subject for painstaking enquiry, in our present ignorant state of the patently abyssal depths and powers of personality. If there be a line of demarcation, let it by all means be ascertained.

That granted and proved, however (and patience, time, and impartiality are essential for the purpose; it may well be that the privilege of establishing the truth is reserved for the sceptical Didymus), does not a greater marvel remain behind? If incarnate humanity be so capable, what of the possibilities of the discarnate? Let it suffice for the present for those who know something of those possibilities to rest rich in the treasure of their own knowledge, and welcome such new evidence as time shall bring to light. Knowledge comes only to those fitted and willing to receive it; the patient, truth-loving sceptic may in some cases be more fitted for it than the uncritical and over-credulous; in either case "the light which one refuses to take in may come back condensed in lightning." If certain facts be found ultimately to be traceable to merely human potencies, so be it. There are others also, surpassing any latent capacities of ours—visions, tokens, and voices saying "unspeakable things," and breathing

"Thoughts beyond the reaches of *our* souls."

"Let not him who seeks cease until he finds;—and when he finds he will be astonished." The controversy respecting the spiritistic hypothesis is caused by

a certain class of mind taking an unduly narrow and rationalistic, rather than a moral, view of life.

CONCLUSION

Along the lines of reasoned demonstration here traversed, then, we may, I think, justify our moral intuitions in regard to the superphysical world and the phenomena which we are accustomed to associate with it. The views here expressed are of course capable of extensive amplification exceeding the limits of this paper, but such as they are I believe them to be well founded. Cosmical speculation is generally a perilous task, for even the expert and best equipped professional philosopher; and the sense of temerity, great as I feel it to be, often weighs least heavily upon the unqualified and adventurous tyro. Still, even one who, like Browning's Karshish, is but

"The picker up of learning's crumbs,
The not incurious in God's handiwork,"

and who is not hampered by the restrictions attaching to the professional scientist and theologian, may hope, perhaps, out of the fragments that fall from the tables of the rich to regale himself, and offer of his medley garnerings to others.

The knowledge at our disposal nowadays, imperfect as it is, leads up at all events to an outlook upon the Universe that is juster and steadier, more comprehensive and satisfying, than has at any previous time been possible to the intellect of man. We see a self-contained and self-conserving Cosmos, one in essence; dual, even multiple, in aspect. A fraction of it, finite and conditioned, is perceptible to human sense-organs; the remainder of its immeasurable bulk is eternal, unconditioned, and unmanifest to sense perception, but is lying close at hand, waiting to be still further perceived by faculties of consciousness the seeds of which are latent in us and are destined to mature in the patient course of evolution. Separate and wholly different sets of laws are seen to prevail in Nature's manifested and

unmanifested planes; "that which is flesh is flesh and that which is spirit is spirit." And through the inter-mixture in man of a physical nature, subject to laws appropriate to the physical plane, and a spirituality whose true home is in the unconditioned, where separate laws obtain, there is, and must needs be, perpetual illusion and conflict—conflict which is the concomitant of all growth, and which becomes apparent in all forms of individual and social unrest and misery.

The evolutionary process consists in the development of the higher and spiritual at the expense of the lower and physical, and in the process there must needs be a stage or stages of racial growth when the former tends to predominate markedly over the latter. Such a stage seems now to have been reached. We are, despite many appearances to the contrary, living in it; the evidence of the fact is abundant for those who care to look for it. "When the Master of the universe has points to carry in His government He impresses His will in the structure of minds" (Emerson), and the present amazing epoch of scientific discovery and psychical phenomena, it can scarcely be doubted, is due to the promptings of unseen Intelligence. Not only in the sphere of scientific work is such an influence discernible. Along the whole world-wide line of civilised human interests the motion of a tidal current of spirit-force may be perceived. Upon its wave-crests are those, men and nations of men, who are being lifted to truer vision, to larger life; within its troughs are the forces of human inertia and reaction. It seems as though some cosmic principle of spiritual hydraulics (to coin a clumsy but perhaps not inapt metaphor) may be at work, interacting between the seen and unseen planes; and that impulses and instincts from those in the higher life are streaming in on us, unconscious of it though we be.¹ And the gradual as-

¹ Professor Wundt (*System of Philosophy*) has formulated a law of the universe which he calls the *law of increase of spiritual energy*, and is confirmed in his conclusion by Professor W. James (*Human Immortality*, p. 80). This suggestion should be compared with the profound reflections of a modern mystical divine, Rev. John Pulsford, in *Morgenröthe*.

similation of this new knowledge, of these new impulses, cannot but bear fruit in human thought and action. All will come to see that human life is a small segment of a circle, the rest of which, eclipsed from sight at those points whose interchangeable names are birth and death, lies within the higher reaches of the universe. All will come to see that this physical plane is a place for adjusting means to ends, for conditioning consciousness to loftier knowledge; that life, "passing through Nature," must treat her as a preparatory school for the university beyond. They will learn so to adapt and habituate their thought as to discriminate between the illusive and the real, the temporal and the eternal; to observe the physical and superphysical in their just and relative proportions, till, in Mrs Browning's graphic, if flamboyant, phrase, not merely to their intellectual eye but to their new-developed clairvoyant vision

"The sensuous and unsensuous seem one thing,
Viewed from one level;—Earth's reapers at the sheaves
Scarce plainer than Heaven's angels on the wing."

They will the better discern the value and sanctity of human life and, seeing death in its true aspect as an incident in an eternal process, will

"Hate the black negation of the bier,
And wish the dead, as happier than ourselves
And higher, having climbed one step beyond
Our village miseries, might be borne in white
To burial or to burning, hymned from hence
With songs in *praise* of death and crowned with flowers."¹

And, best hope of all—without which, indeed, all else is foolishness and impractical utopianism—from a surer appreciation of metaphysical truths, at the bidding of cosmic laws proclaimed by Wisdom-teachers from of old, and now for the first time receiving intellectual confirmation, human life in this world may come to be modelled on saner and humamer principles. Individualism, the gospel of Self, seen to be a sin against eternal realities, will give way before a growing and generous altruism. The struggle of self for life will,

¹ Tennyson, "The Ancient Sage."

in accordance with the law of inversion, flower into struggle for the life of others, that Good may be for all and in all. From the principle which, we now see, necessitates "an inversion of ideas" whenever any branch of science pushes research to the frontier of the physical and superphysical, of the intellectual and transcendental, some future Newton will doubtless construct an entirely new cosmology, the influence of which will react upon the practical conduct of human life. Politics, morals, sociology, will eventually become transformed and the purpose of evolution, the "far-off divine event," gradually be accomplished by the harmonising of the seen and unseen portions of the universe.

Whoso labours, whoso *thinks* even, towards this great consummation is already unconsciously praying and helping the fulfilment of his prayer:—As above, so below; "In earth as it *is* in heaven."